

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

## UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte RICKY GENE SCHNELLMANN and GRAZYNA NOWAK

Appeal No. 2006-0872  
Application No. 09/899,704

ON BRIEF

MAILED

MAY 12 2006

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Before ADAMS, MILLS, and GREEN, Administrative Patent Judges.

GREEN, Administrative Patent Judge.

#### DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 3, 4, 11-13, 15 and 16. Claims 1 and 11 are representative of the subject matter on appeal, and read as follows:

1. A method of recovering cellular functions in vitro in cells following injury, comprising the steps of:

contacting said cells with ascorbic acid or a salt of ascorbic acid,

wherein said cellular functions are selected from the group consisting of proliferation, mitochondrial function, Na<sup>+</sup>-K<sup>+</sup>-ATPase protein activity, and active Na<sup>+</sup> transport.

11. A method of recovering cellular functions following injury in an individual in need of treatment, comprising the steps of:

administering a therapeutically effective amount of ascorbic acid or a salt of ascorbic acid to said individual,

wherein said cellular functions are selected from the group consisting of proliferation, mitochondrial function,  $\text{Na}^+ \text{-K}^+$ -ATPase protein expression,  $\text{Na}^+ \text{-K}^+$ -ATPase protein activity, and active  $\text{Na}^+$  transport.

The examiner relies upon the following references:

Fahim	4,711,780	Dec. 8, 1987
Rath et al. (Rath)	5,230,996	Jul. 27, 1993

Nowack et al. (Nowack), "Renal Cell Regeneration Following Oxidant Exposure: Inhibition by TGF- $\beta_1$  and Stimulation by Ascorbic Acid," *Toxicology and Applied Pharmacology*, Vol. 145, pp. 175-183 (1997) (abstract only).

Saika et al (Saika), "Ascorbic acid phosphate ester and wound healing in rabbit corneal alkali burns: epithelial basement membrane and stroma," *Graefes Archive for Clinical and Experimental Ophthalmology*, Vol. 231, pp. 221-27 (1993) (abstract only).

Claims 1, 3, 4, 11-13, 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being obvious over Fahim, Rath, Saika or Nowak,<sup>1</sup> either alone or in combination. After careful review of the record and consideration of the issues before us, we affirm.

### DISCUSSION

As the claims stand or fall together, see Appeal Brief, page 6, we focus our analysis on independent claim 11.

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<sup>1</sup> With respect to the examiner's reliance on the Saika and Nowak abstracts, we note "[c]itation of and reliance upon an abstract is generally inappropriate where both the abstract and the underlying document are prior art." MPEP §706.02 (II) (8<sup>th</sup> edition, Revision 2, May 2004). Moreover, in order for meaningful appellate review to occur, the examiner must present a full and reasoned explanation of the rejection see, e.g., *In re Lee*, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1432 (Fed. Cir. 2002), and that would include analysis of the full underlying document.

According to the rejection:

Each reference discloses that ascorbic acid phosphate or ascorbic acid promote recovery of cellular functions and wound healing such as proliferation following injury, including eye injury, that is caused by a variety of conditions, including toxic substances.

Examiner's Answer, page 4.

"In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant." In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) (citations omitted). We find that the examiner has met that burden, and the rejection is affirmed. Moreover, as we find that the Fahim reference alone renders the invention of claim 11 unpatentable, we further focus our analysis on that reference.

Claim 11 is drawn to:

A method of recovering cellular functions following injury in an individual in need of treatment, comprising the steps of:

administering a therapeutically effective amount of ascorbic acid or a salt of ascorbic acid to said individual,

wherein said cellular functions are selected from the group consisting of proliferation, mitochondrial function,  $\text{Na}^+ \text{-} \text{K}^+$ -ATPase protein expression,  $\text{Na}^+ \text{-} \text{K}^+$ -ATPase protein activity, and active  $\text{Na}^+$  transport.

Fahim teaches a composition for promoting epithelial regeneration, i.e., proliferation,<sup>2</sup> see id. at Col. 1, lines 11-13, wherein the composition comprises a mixture of vitamin C (ascorbic acid), zinc and sulfur amino acid, see id. at Col. 1, lines 53-55. “The vitamin C may be provided as ascorbic acid, sodium ascorbate or the like.” Id., Col. 1, lines 57-59. Fahim further teaches that:

The medication can be used to treat a variety of conditions. For example, in the reproductive tract, it can be used to treat vaginitis and cervicitis. In the genitourinary tract, it can be used to treat urethral infections, especially the irritated bladder of schistosomiasis patients, and in the eyes it can be used to treat exptropian eyelids, blepharitis, keratitis, and pinkeye and to prevent cataracts and diabetic retinopathy. On the skin, it can be used to treat burns, cuts, fever blisters, poison ivy, chigger bites, diaper rash, genital herpes blisters and even sunburn.

Id. at Col. 2, lines 35-45.

Thus, Fahim teaches the method of claim 11, as Fahim teaches a method of recovering cellular functions following injury in an individual comprising administering a therapeutically effective amount of ascorbic acid or a salt thereof, wherein the cellular function is proliferation. The rejection of claims 1, 3, 4, 11-13, 15 and 16 under 35 U.S.C. § 103(a) is affirmed. See, e.g., MercExchange, L.L.C. v. eBay, Inc., 410 F.3d 1323, 1330, 74 USPQ2d 1225, 1231 (Fed. Cir. 2005) (noting that although the defendants invalidity arguments were limited to obviousness, arguments as to anticipation were still preserved as “anticipation is the epitome of obviousness”); In re McDaniel, 293 F.3d 1379,

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<sup>2</sup> Note that claim 1 of Fahim is drawn to “A medication for treating epithelial tissue comprising vitamin C, a zinc salt and a sulfur amino acid in an amount sufficient to stimulate cell proliferation and new cell formation.”

1385, 63 USPQ2d 1462, 1466 (Fed. Cir. 2002) (noting that it is “well-settled that ‘anticipation is the epitome of obviousness.’”).

Appellants argue that Fahim does not teach that “vitamin C would be effective or useful when used alone as claimed herein,” thus asserting that “Fahim . . . actually teach[es] away from the instant invention.” Appeal Brief, page 7.

Appellants’ arguments are not found to be convincing, as claim 11 is not limited to the administration of vitamin C alone. Claim 11 (emphasis added) is drawn to “[a] method of recovering cellular functions following injury in an individual in need of treatment, comprising the steps of[ ] administering a therapeutically effective amount of ascorbic acid or a salt of ascorbic acid to said individual.” The use of the transitional term “comprising” does not exclude the administration of additional therapeutic ingredients. See, e.g., Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) (noting that “comprising” is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still be within the scope of the claim).

Appellants argue further that “there is no suggestion or motivation to modify any of the cited references to use L-ascorbic acid phosphate alone to recover mitochondrial function, Na<sup>+</sup>-K<sup>+</sup>-ATPase protein expression, Na<sup>+</sup>-K<sup>+</sup>-ATPase protein activity, and active Na<sup>+</sup> transport as claimed herein.” Appeal Brief, page 9. Finally, appellants argue that “[o]ne of ordinary skill in the art

would readily recognize that the cellular functions disclosed in Fahim . . . are different and distinct from those claimed in the present invention, and these different cellular functions may very well involve different cellular pathways."

Appeal Brief, page 10.

Again, appellants' arguments are not found to be convincing. As noted above, claim 11 is drawn to "[a] method of recovering cellular functions following injury in an individual in need of treatment, comprising the steps of[ ] administering a therapeutically effective amount of ascorbic acid or a salt of ascorbic acid to said individual." Thus, claim 11 is not limited to the use of L-ascorbic acid phosphate alone, nor is it limited to the recovery of mitochondrial function,  $\text{Na}^+ \text{-K}^+$ -ATPase protein expression,  $\text{Na}^+ \text{-K}^+$ -ATPase protein activity, and active  $\text{Na}^+$  transport, as claim 11 also recites the recovery of cell proliferation, which is explicitly taught by Fahim.

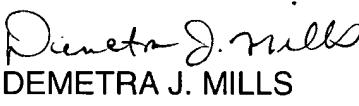
Moreover, claim 12, which depends from claim 11, specifies that the injury may be skin abrasions, cuts and burns, and Fahim specifically teaches treatment of those injuries. Thus, the recovery of mitochondrial function,  $\text{Na}^+ \text{-K}^+$ -ATPase protein expression,  $\text{Na}^+ \text{-K}^+$ -ATPase protein activity, and active  $\text{Na}^+$  transport would necessarily be inherent in the treatment of those injuries. Note that "[n]ewly discovered results of known processes directed to the same purpose are not patentable because such results are inherent." Bristol-Myers Squibb Co., v. Ben Venue Laboratories Inc., 246 F.3d 1368, 1376, 58 USPQ2d 1508, 1514 (Fed. Cir. 2001).

CONCLUSION

Because the examiner has set forth a prima facie case of unpatentability, the rejection of claims 3, 4, 11-13, 15 and 16 under 35 U.S.C. § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

	DONALD E. ADAMS )
	Administrative Patent Judge )
	DEMETRA J. MILLS )
	Administrative Patent Judge )
	LORA GREEN )
	Administrative Patent Judge )
	BOARD OF PATENT )
	APPEALS AND )
	INTERFERENCES )

LG/lbg

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